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ABSTRACT

Noting research suggesting that something more than rote memorization is involved in the process of spelling, this paper describes effective instructional strategies to help students improve their spelling abilities. Following an introduction on the memorization/cognition camps in spelling research, the paper discusses current, but less effective, classroom practices, such as studying lists of "demon" words, writing words several times, using inappropriate word lists, studying homonyms, and sentence dictation. The paper then examines research based practices, including invented spelling, and discusses four goals that focus on the purposes of learning strategies to improve spelling. Next, the paper presents eight effective instructional strategies: (1) using self-corrected tests and a study strategy, (2) using word lists, (3) relating spelling instruction to writing activities, (4) keeping formal spelling lessons to optimum length, (5) using typewriters and the "Imagetics" machine, (6) using games for spelling instruction, (7) using computers for spelling improvement, and (8) using standardized test formats. The paper concludes by noting that effective strategies for elementary schools students also work at the secondary level and provides a summary of major implications of spelling research. An annotated bibliography of works on the study and teaching of spelling is included. (HTH)

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English Language Arts

Concept Paper

Oregon Department of Education

Spelling

INTRODUCTION

Although spelling plays a minor role in the total program of most schools, it has maintained a certain permanency because parents, teachers, and the public in general have insisted that it remain in the curriculum. Spelling instruction has been around for a long time, and the body of varied research and reports written about every aspect of spelling is overwhelming.

One can trace some basic agreements in a significant body of respected research, going as far back as 1919 and reflected by Fitzsimmons and Loomer (1974) among others. These authorities see learning how to spell as primarily a visual-memory skill. A few general rules about spelling are reliable and some drill is recognized as an effective teaching device. Spelling in this sense involves a process of memorizing the spelling of words.

On the other hand, another growing body of important research approaches the concern for spelling from a different perspective. The work of Read (1975), Henderson and Beers (1980), and Hodges (1981) suggests that something more than rote memorization is involved in the process of spelling. They draw upon some recent beliefs about the intellect in general. Individuals actively participate in their own learning by discovering or creating generalizations about everything in their

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environment. Read (1975), Henderson and Beers (1980), and Templeton (1986) maintain that spelling clearly demonstrates this developmental cognitive concept of learning.

CURRENT, BUT LESS EFFECTIVE, CLASSROOM PRACTICES

One disturbing factor to researchers concerned with classroom practices and the teaching of spelling is that their findings are not reaching the classrooms. There is a contradiction between what researchers think should be going on in the classroom and what actually occurs. Some authorities think that much of the research that could help teachers do a better job of teaching spelling has not reached teachers because the research is not reflected in the texts and workbooks they use.

For the most part teachers are textbook-oriented and prefer a formal instructional approach to spelling. They tend to teach whatever comes up next in their local spelling texts. Consequently, sanctioned classroom spelling activities go on year after year that, according to most research, do little or nothing to improve spelling. The following are some of the more common, but not necessarily effective, practices. (Allred 1984, Laurent 1984)

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1. **Studying words that have common letter patterns** (sat, rat, mat, etc.). Such activity does produce better scores for short-term tests. However there is a significant loss in long-term tests, and this practice encourages students to spell unknown words by remembering a rhyming word that may or may not be spelled the same way.
2. **Studying words that have common sounds** (hole, whole; pray, prey; heard, herd; to, too). Students tend to rely solely on sound and are unaware that meaning determines spelling when there are several graphemic options.
3. **Studying common lists of "demon" words.** All students do not have the same difficulty with the same words. Research indicates that certain words are difficult for some students and not for others.
4. **Studying rules of spelling.** Too many rules come into play in most texts. Researchers recommend that only a limited number of rules are of value to a student. Some basal spelling books have rules on practically every page and teachers tend to cover most of them. In a study that included student reaction to spelling, Laurent and Stetson state that good spellers indicated they

seldom resort to rules of spelling. At the same time 50 percent of their teachers viewed in the study insisted that learning rules of spelling is an effective activity.

5. **Studying lists of words.** Too many words are usually included in the lists of most commercial spelling programs. These lists may not include words students use daily in their speaking and writing activities.
6. **Studying words in context.** This practice usually involves activities such as sentence completion, using context clues, filling in blanks, and multiple choice testing. Although knowing the meaning will help to determine the spelling when there are several graphemic options available, the actual activities have little to do with spelling.
7. **Making sentence dictation an important initial instructional activity.** Some spelling improvement may occur simply because a student is listening more carefully. However, the activity itself does not focus the student's concerns on what his or her actual spelling problems are.
8. **Studying words phonetically and translating them into regular or traditional spellings.** This activity provides the speller with an alternative spelling of every word which, under fire of writing, increases the opportunity to spell incorrectly.
9. **Writing words several times.** Doing this activity without the benefit of immediate feedback and self-correction after each writing of the word encourages incorrect spelling.

RESEARCH-BASED PRACTICES

How do students learn to spell if the activities above tend to produce little or no spelling improvement? What activities should a teacher pursue to carry on successful spelling instruction? First of all, research indicates that teachers need to take a broader view in terms of how students learn to spell. Hopefully, this will

direct them toward different classroom activities that have a better potential for success. (Henderson and Beers 1980, Hodges 1981, Read 1986.)

Fitzsimmons and Loomer (1978), and Stetson and Taylor (1982) agree that when a teacher designs class activities that include both formal as well as functional instruction, students will learn how to spell. However, before this can happen, many teachers will need to adopt a more contemporary view about the nature of spelling ability, namely that learning to spell is more a conceptual process than it is a memorization process.

Inventive Spelling

Teachers should, for example, be aware of the school of thought in spelling that advocates inventive spelling. Read (1986) insists that with all young students spelling is developmental, subject to phenomena other than memorization. In other words, as various stages of mental development occur students will spell words in certain ways. As the student matures, he or she will recognize and relate certain written symbols to sounds and not recognize others.

This suggests that in the lower grades, at least, teachers should include class activities that allow students to write words as they understand them. The teacher provides reinforcement for that portion of the word that is spelled correctly and

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help for the portion of the word that is not. Regardless of grade level, however, students should feel free to use invented spellings during the drafting stages of writing in order to keep an uninterrupted flow of ideas going.

The inventive spelling concept does seem to mesh with the research by Read (1975) and Henderson and Beers (1980) who believe that

there are underlying cognitive processes in learning to spell that are developmental in nature. As students mature, their ability to spell becomes increasingly related to their understanding the structural and semantic relationships of words for which the sound-letter connection is only a part. They develop more sophisticated understandings of spelling as they interact more and more with language in and out of school. They actually learn to spell as they become more involved with written language in everyday use. They see for themselves the interrelationship of components of words as they study other subjects.

Goals for Spelling Instruction

In approaching any spelling program, it is important to have in mind goals which focus on the purposes of learning strategies to improve spelling. Four such goals are listed below. (Dunkeld, 1987)

1. Students will attempt to spell every word they want to write.

This goal clearly charges the teacher to encourage and support resourceful spelling efforts. Students must rely on a variety of strategies, including invention, to spell unknown words.

2. Students will learn the most frequent 4,000 to 5,000 common words.

This goal does not negate inventive spelling as a way to learn. It does, however, defend the need to include some formal spelling instruction in a total program.

3. Students will become aware of the words they can spell and the words they cannot spell.

This goal really implants in students, even at an early age, a sense of cultivating an awareness of which words they do not know and a motivation for finding out how they should be spelled. It can become a patterned behavior that in later years evolves into automatic proofreading.

4. Students will know and use several resources to check words.

This goal will make students accustomed to checking not only the dictionary but other

sources for word information, e.g., the encyclopedia, the thesaurus, electronic aids such as computer spelling verifiers, and special works such as a synonym finder.

EFFECTIVE INSTRUCTIONAL STRATEGIES

Assuming that spelling should be taught in a functional manner, not isolated from other subject areas; and assuming that formal instruction is also necessary, the question of instructional methods arises. What are some of the successful instructional practices that stem from formal and functional spelling programs?

The following commentary identifies successful practices supported by research as well as some remarks about new practices that show promise of success but need further study and research.

1. Using Self-Corrected Tests and a Study Strategy

Authorities recognize students correcting their own misspellings as one of the most important factors in learning to spell. Results are particularly good when the *missed* words on a pretest are studied in a systematic manner that has the student:

- a. pronounce the word
- b. say the word
- c. visualize the word and spell it in his mind
- d. write the word and check the spelling for accuracy

Best results occur when students study missed words immediately after a test and when they continually compare latest test results with earlier tests. (Allred 1984)

2. Using Word Lists

Research, both past and present, overwhelmingly supports the list form for initial presentation of words at all levels. The words should come from authoritative sources that have considered frequency of use, difficulty for grade levels, geographical distribution, and permanency of words. Much research has been done in this area. About

4,000 common words continue to represent 97 percent of the words children and adults will ever use in their writing (Allred 1984). Every student deserves this core vocabulary for present and future use. Some researchers, Templeton (1979) and Wallace (1972), found that word lists together with contextual presentations are superior to the use of word lists alone. This reinforces the notion that a student's spelling skill will improve as he or she becomes involved with other language activities.

3. Relating Spelling Instruction to Writing

In addition to giving students a word list from authoritative sources, some of the words should come from materials students are studying currently. Research continues to make the point that spelling should not be taught in isolation from other language arts, particularly in relation to writing. The latest instructional approach in writing as a result of the National Writing Project and a number of researchers calls for a revolutionary approach to writing that concentrates on correct spelling as a final step prior to sharing writing with others. The stages of writing include prewriting, writing, revising, editing, and publishing. Some spelling is involved in most of these stages. However, the writer focuses efforts to improve spelling at the editing stage. Misspelled words from student writing should therefore be included in word lists for future study.

"Researchers recommend that only a limited number of rules are of value to a student."

4. Determining Length of Formal Spelling Lessons

For years, authorities have agreed that too lengthy a formal spelling period lowers rather than raises spelling achievement. Dwelling

too long on drill becomes self-defeating. Though the ideal time slot has not been established, Allred (1984) supports some earlier findings. Sixty to seventy-five minutes of formal spelling instruction is recommended if it is spread out over the five-day school week.

5. Using Typewriters and the "Imagetics" Machine

Cotton (1982) claims that typewriters and the "Imagetics" machine (which has students trace words with a stylus) do help students improve in spelling because they help students visualize the words. She cites research which claims that students with spelling difficulties, particularly those who cannot type quickly, must work slowly and carefully. This tends to produce better results. Cotton mentions also that the "imagetic" device which, like the typewriter, relies on student visual skills was a better tool to use than having students just drill and practice or carry on a self-directed study.

6. Using Games for Spelling Instruction

The role of games in spelling instruction is not new. Research indicates that such activity is valuable only from the standpoint of stimulating student interest. Games should always play a supplementary role toward the larger purpose of spelling improvement. Caution is suggested when devising spelling games. Non-competitive games such as word search puzzles may increase motivation without creating a sense of defeat.

7. Using Computers for Spelling Improvement

The verdict is not yet in concerning computers and spelling. Present research indicates that computers used in spelling

have tremendous potential. For one thing the computer has remarkable versatility. It can store, display, motivate, reward, provide drill, allow student control, and individualize instruction.

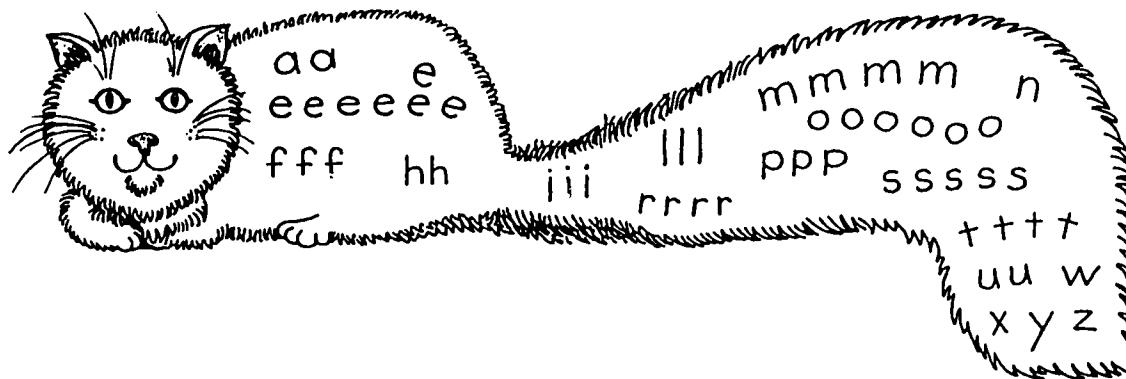
The computer's capacity to diagnose, prescribe, and visibly portray letters and parts of words in a variety of ways may eventually help students with all sorts of individual

"Authorities recognize students correcting their own misspellings as one of the most important factors in learning to spell."

spelling problems. One study reported that children involved in a particular study did not seem to have a sense of failure when they made an incorrect response on a teletype terminal. Rather, they reacted as if they were playing a challenging game with the opportunity to try again. (Allred, 1984) At this point, however, research still views the computer as a supplement to regular instructional methods.

8. Using Standardized Test Formats

Standardized tests use various question formats to assess spelling achievement. Practice in a variety of these formats will make students more confident in attempting test items. Of course, this does not improve spelling ability, but it does improve test-taking skills.



CONCLUSION

There is an increasing awareness of what research considers productive and nonproductive classroom practices in spelling.

Teachers must provide ample opportunities for students to explore English spelling through reading and writing activities including activities in other content areas. Activities of this type might be called the functional part of the spelling program consisting largely of informal instruction. At the same time research suggests that formal spelling classes should continue to have a place in the spelling program as well. So, on the one hand students will study teacher- or text-oriented spelling material, but they will also develop spelling ability through reading and writing assignments in other fields.

While there has been little research done in the area of spelling with students beyond the sixth grade level, there is some information which indicates that many of the effective strategies for

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elementary students should be continued in the upper grades. A study by Davis (1987) showed a significant gain for eighth grade students who received some spelling instruction over students who received no instruction. Indications are that teacher expectations for correct spelling in finished pieces of work are an important factor in student improvement.

The following suggestions summarize the major implications of the research and serve as a guideline to those teachers who wish to develop classroom practices that are in tune with research.

1. Carefully study spelling materials.

- Review materials for research-based philosophy and teaching approaches.
- Look for materials that have formal instructional activities as well as activities that cross into other subject areas, particularly writing.
- Include the 4,000 to 5,000 words most frequently used.
- Include words taken directly from various curriculum materials at each grade level.
- Include words of immediate need in the classroom, particularly from students' written work.
- Use a limited number of rules. Refer to rules of spelling that have few exceptions and cover a large number of words.
- Use placement tests to match students to the appropriate level of materials.
- Include phonics instruction for spelling at early grades only when it is used in combination with the whole word or sight method.
- Use the test-study-test approach rather than the study-test method.
- Include self-corrected test activities.

2. Use research-supported classroom strategies.

- Teach spelling in meaningful contexts of reading and writing.
- Encourage invented spelling, particularly in the primary grades and during the drafting stages of writing.
- Deal with words and material that are appropriate to students.
- Teach a spelling study technique.
- Initiate pretesting. Have students study only unknown words rather than all words.
- Plan between 60 and 75 minutes of formal spelling activities per week at elementary and middle school grades.

By incorporating research-based materials, sound instructional strategies, reinforcement of correct spelling in all curricular areas, and clear understanding of the purposes of spelling, schools can help students to improve their spelling abilities. Good spelling skills and knowledge of resources for spelling will help students as they interact with the written word.

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